



Immersive Imaging Workshop



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On-Site Mission Planning

SOF Enabler Title # 8: Reality Enhancement

Virtual reality training:

- **Develop high quality virtual reality (VR) planning and augmented reality (AR) training systems**
 - ❖ **stimulate the senses in a realistic training scenario**

New form, fit, function imaging capability could make a difference



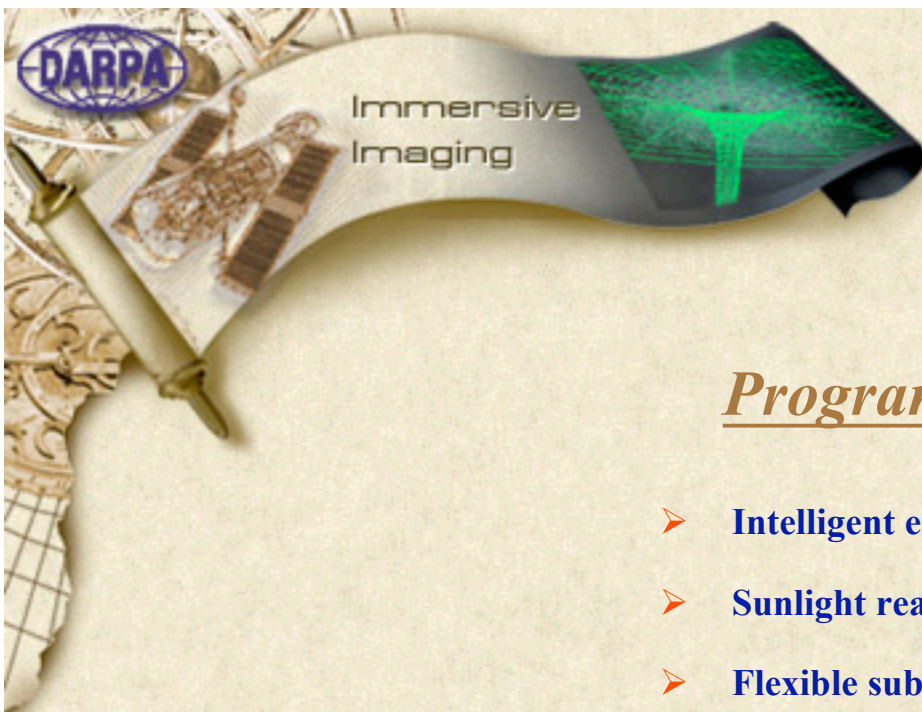
On-Site Mission Planning

SOF Enabler Title # 8: Reality Enhancement

Virtual reality training:

- **Develop high quality virtual reality (VR) planning and augmented reality (AR) training systems**
 - ❖ **stimulate the senses in a realistic training scenario**
- **Simulate actual SOF mission profiles**
 - ❖ **include sights and sounds**

New form, fit, function imaging capability could make a difference



Program Goals

- **Intelligent emissive pixels (nodes on a network)**
- **Sunlight readable (1000 nits)**
- **Flexible substrates**
- **Rapid set-up, take-down (< 10 min)**
- **Large Area (50 ft. ²), without tiling**
- **Portable, Wireless**
- **Lightweight 0.5 lb/ft₂**
- **Resolution: 1M pixels/ft₂**
- **Power: 10W/ft₂**
- **Low cost – wide width, roll-roll mfg**

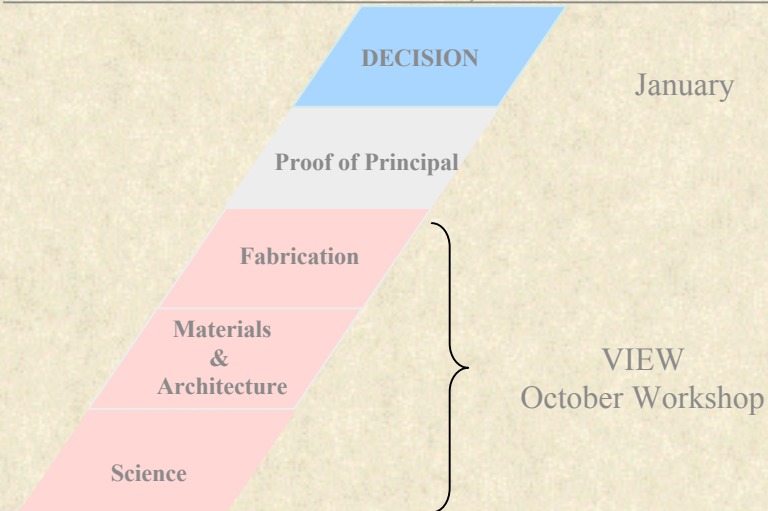


Immersive Imaging

Program Goals

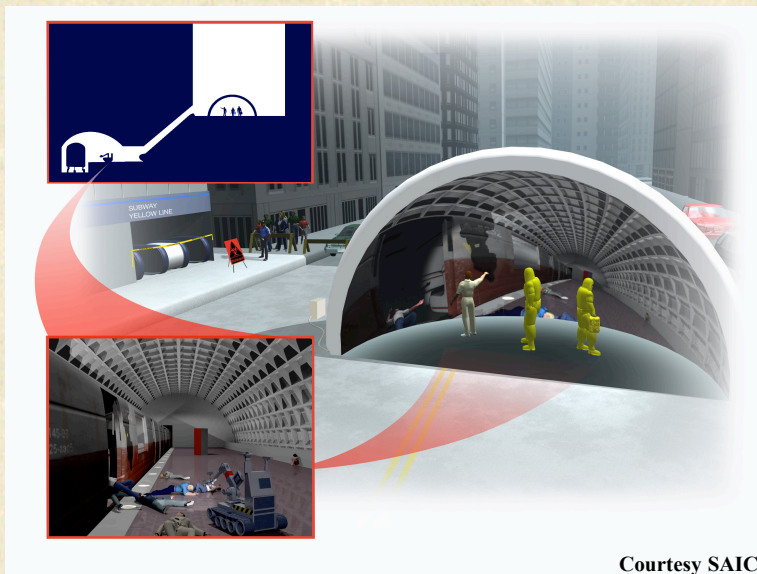
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Technical Thrusts: Materials, Architecture & Process Development



Military / Homeland Security Impact

- **Site specific, rapid setup event rehearsals**
 - ❖ Mission planning
 - ❖ Exploit Near Real Time Actual Operations Video
 - ❖ Portable, on-site flight simulators
- **HAZMAT Event Rehearsal**
 - ❖ First responders
- **Real-time, reach-back teleimmersion cones**
 - ❖ Collaboration approaching reality



No emissive technology exits for hi-res, large area, efficient flex displays